THE IBIS.

NINTH SERIES.

No. XVIII. APRIL 1911.

VII.—*Notes on the Ornithology of Corsica.*

By the Rev. Francis C. R. Jourdain, M.A., M.B.O.U.

Introduction.

The island of Corsica (Κύρνος of the Greeks) lies in the Western Mediterranean due north of Sardinia, from which it is separated by the narrow Straits of Bonifacio. It lies between 41° 21′ and 43° N. latitude, and 8° 30′ and 9° 30′ E. longitude, and has an extreme length of 116 miles and a breadth of 52 miles, while the area is estimated at about 3368 square miles. It is easily accessible to English visitors by steamer from Marseilles, and there is a good service of boats from that port to Bastia and Ajaccio.

Almost the whole of the island is occupied by an intricate chain of mountain systems. The prevalent rocks are granite, gneiss, and mica slate; while beds of porphyry, serpentine, and syenite also occur. In the middle of the island the mountains attain considerable heights. The loftiest peak is Monte Cinto (8889 ft.), but Monte Rotondo (8609 ft.), Pagliorba (8284 ft.), and Monte d'Oro (7841 ft.) are formidable rivals. Towards the north, near Cap Corse, the scenery is tamer and a larger proportion of the land has been brought under cultivation, but except in the narrow belt of alluvial land along the east coast and the low ground on the foothills, the country remains unspoilt by the hand of

man. Along the western and southern coasts the mountains jut out into the sea and the scenery is wild and picturesque in character. Along the eastern side, on the other hand, between the great rampart of rock, which reaches from north to south, and the Mediterranean, there lies a belt of almost level ground. In the neighbourhood of Aleria this plain is dotted with extensive lagoons, and, owing to the prevalence of malaria, is almost deserted in the height of summer. In fact, everywhere along the "plage" the population is partly migratory, and, when the hot weather sets in, a long procession of families wends its way towards the heights to spend the summer in the mountain-villages, which in their turn are deserted in the winter. Here, in the low ground are extensive woods of cork-oak and in some districts olive and orange groves and vineyards; while wheat, rye, and oats are also grown, but not in large quantities. On leaving the low ground and ascending the mountain, we find its sides clothed with forests, but these vary much in character. In the north-east the chestnut is the prevalent tree. Many of these trees are of great age and are little more than vast empty shells. In the north-west there are large olive-plantations, and in some districts the beech is largely grown, especially in the forest of Boccagnano, which covers some 13,000 acres. But perhaps the most characteristic forests of Corsica are the great pine-forests, such as those of Vizzavona (60,000 acres), Aïtone (3400 acres), &c. Three species of pine are found in the island, but the two most important are *Pinus pinaster* (or *P. maritima*) and *P. laricio corsicana*. These two are found in approximately equal numbers—one species prevailing in one locality and the other in a second, or both growing side by side. They are easily distinguishable by the fact that the trunk of *P. laricio* is much smoother and whiter than the deeply grooved and more highly coloured bark of *P. pinaster*. *Pinus pinea* is also found, but generally as isolated specimens, which were probably planted in the cultivated parts for the sake of the cones. The cones of all three species are very different and also form a ready means of identification. Above the forest-limit the bold granite peaks of the lower

spurs, and the vast masses of the main mountain chains, covered for the greater part of the year with snow, stand out in bold relief. It must, however, not be supposed that the whole of the mountain surface is occupied by forests or barren peaks and snowfields. Everywhere in the island one meets with the "macchia," differing in character, of course—here consisting of cistus bushes, broom, and lavender, which is easily brushed aside and forms but a slight encumbrance in one's way; there a vast tangle of lentiscus, myrtle, azalea, and many other shrubs, extending high overhead and rendering progress almost impossible. But from an ornithologist's point of view this sea of brushwood has many advantages. In the first place, it furnishes a secure retreat for thousands of small birds, which breed there undisturbed, except perhaps at rare intervals when some wandering goatherd fires a patch of scrub, or the roots of the shrubs are grubbed up for pipe-bowls and the branches stacked for firewood.

One last word on the natural conditions. The presence of these great forests ensures a continual supply of pure fresh water from the hills. The rivers are, however, little more than rapidly flowing streams of no great size, haunted only by a few pairs of the local race of the Dipper and the Grey Wagtail.

Literature.

With regard to the literature, it is interesting to note that until quite recently nearly all the work of ornithological exploration had been done by Englishmen. Of late years, however, our German cousins have shown more activity in the field, while the late Professor Giglioli was instrumental in largely increasing the list of autumn visitors.

The following is a list of the most important publications on the subject:—

[In 1866 the Rev. W. H. Hawker visited the island and explored the higher mountains, but his paper in the 'Alpine Journal,' 1869, p. 269, contains nothing of interest to the ornithologist. The identification of the Imperial Eagle is probably an error for the Golden Eagle, *A. chrysaëtos*.]

1876. C. B. Wharton, "Notes on the Ornithology of Corsica," Ibis, 1876, pp. 17–29.—An excellent list of 113 species, of which 90 were actually shot by the writer and the remaining 23 carefully identified. Mr. Wharton was in Corsica from September 26, 1874, to the beginning of May 1875, and most of his work was done along the west and north-east coasts. Among the more notable records is one of the breeding of the Carrion-Crow, *Corvus corone* L., in Corsica, the only instance known. Several species are admitted to the present list on the authority of this list alone, *e. g.* the Redwing, Aquatic Warbler, Ortolan, Collared Flycatcher, Great White Heron, and Little Bittern.

1876. W. Jesse [Supplementary Notes to Mr. Wharton's list], Ibis, 1876, pp. 380–383.—In this letter to the Editor, Mr. Jesse, after some general observations and critical notes, gives a list of 7 species obtained by him in 1865 and 1866 (of which 6 were not mentioned by Wharton) and of 7 additional species obtained in 1875, also not previously recorded, thus adding 13 species to the list.

1884. Dr. R. B. Sharpe, "On an apparently new Species of Nuthatch," P. Z. S. 1884, pp. 233, 329; "Further Notes on Whitehead's Nuthatch," *t. c.* p. 414, pl. xxxvi. (Description and figure of adult male and female of *Sitta whiteheadi*.)

1885. J. Whitehead, "Ornithological Notes from Corsica," Ibis, 1885, pp. 24–48, pl. ii.—This is a most important annotated list of 176 species, identified or obtained by Mr. Whitehead during a residence of about fifteen months in Corsica, from November 1882 to June 15, 1883, and again in the first half of 1884. It contains valuable notes on the migration of many species as well as full breeding data, while many of the skins and eggs obtained are now at Tring and a few in the British Museum. Whitehead did not collect series of skins, but in most cases was content with only two or three specimens of each species. He is still the sole authority for the inclusion of some 32 species in the Corsican list, and is the only naturalist who has taken the eggs of the Common Whitethroat and Short-toed Lark on the island; while he was the first to investigate the breeding species as a whole. The most remarkable discovery made by him was, of course, the new species of Nuthatch known by his name—an isolated form the nearest allies of which are found in Canada and Mongolia!

1890. Prof. E. H Giglioli, 'Primo resoconto dei risultati della inchiesta ornitologica in Italia. Parte seconda: Avifaune locali,' pp. 631–642. Introduction and briefly annotated list of 220 species, compiled from the papers of Wharton and Whitehead, together with the writer's own observations in September and October 1877 and October 1889.—This is the first attempt to collate what had been already recorded on the Ornithology of the island, and in

addition many visitors on migration are mentioned for the first time. It must, however, be admitted that in several cases the evidence is far from conclusive, and confirmation is required, e. g., *Gecinus viridis*, *Athene noctua* (said to be resident and not rare), *Tadorna cornuta*, &c.

1891. J. Backhouse, "Winter Notes from Corsica," Zoologist, 1891, pp. 371–376.—A briefly annotated list of about 76 species observed in December 1890 and January 1891, chiefly in the neighbourhood of Ajaccio.

1897. H. C. Playne, "Ornithological Notes from Corsica," Zoologist, 1897, pp. 254–257.—A list of 60 species observed between April 10 and 21, 1897, while walking from Ajaccio across the mountains to the east coast and thence back to Corte.

1898. H. C. Playne, Zoologist, 1898, p. 275. Correction.—After a second visit in April 1898 two errors of identification in the previous paper were discovered (Citril Finch and Wood-Lark for Serin and Crested Lark) and two other species were added to the list.

1899. Dr. A. Koenig, Ornithologische Monatsberichte, vii. p. 120, "Eine neue Vogelart von der Insel Corsica." (Description of *Citrinella corsicana* with diagnosis.)

1900. A. D. Sapsworth, Bulletin Br. Orn. Club, xi. p. 12. Exhibition of skins of *Sitta whiteheadi* and note on the Corsican Dipper.

1901. Dr. A. Koenig, Journal für Ornithologie, 1901, p. 99. (Remarks on rare species from the Mediterranean Region, including *Sitta whiteheadi*, *Citrinella corsicana*, and the Corsican race of *Cinclus*, obtained in Corsica during the spring of 1896.)

1901. [Pastor O. Kleinschmidt, Ornithologische Monatsberichte, ix. pp. 167–169, "Beschreibung neuer Formen aus Tunesien und Sardinien." (Includes descriptions of *Strix ernesti*, *Accipiter wolterstorffi*, and a *Dendrocopus*, and notes on *Laniidæ* from Sardinia).]

1902. [Conte Arrigoni degli Oddi, 'Avicula,' vi. pp. 102–4. (Descriptions of *Dendrocopus major harterti*, *Cotile obsoleta sarda*, *Sylvia atricapilla pauluccii*, *Petronia petronia hellmayri*, and *Carduelis carduelis tschusii*, from Sardinia.)]

1902. Conte Arrigoni degli Oddi, 'Atlante Ornitologico,' p. 150. (Description of *Cinclus cinclus sapsworthi* from Corsica.) *Cf.* also Hartert, Bulletin Br. Orn. Club, xiv. p. 51 (1904), sub nomine *Cinclus cinclus sardus* (Sardinia).

1903. Pastor O. Kleinschmidt, Ornithologische Monatsber. xi. p. 6, "*Parus corsus*, forma nova" (Corsica); *t. c.* xi. p. 92, "Neue Formen von Sardinien" (Descriptions of *Corvus sardus*, *C. sardonius*, and *Garrulus ichnusæ*: Sardinia); *t. c.* xi. p. 152 (Description of *Astur gentilis arrigonii*: Sardinia); *t. c.* xi. p. 186 "*Parus sardus*, forma nova" (Sardinia).

1903. [Ritter v. Tschusi, Ornithol. Jahrbuch, xiv. p. 8, "Ueber paläarktische Formen" (Description of *Passer hispaniolensis arrigonii*: Sardinia); p. 139 (Description of *Garrulus glandarius sardus* from Sardinia).]

1903. [Siga. C. Picchi, 'Avicula,' vii. p. 40. (Description of *Buteo buteo arrigonii* from Sardinia.)]

1906. [Pastor O. Kleinschmidt, 'Falco,' ii. p. 71. (Description of *Erithacus dandalus sardus* from Sardinia.)]

1906. Dr. E. Hartert, Bulletin Br. Orn. Club, xvi. p. 45. (Description of *Regulus regulus interni* from Sardinia and Corsica.)

1908. Rev. F. C. R. Jourdain, Bull. B. O. C. xxiii. p. 16. (Exhibition of eggs of *Sitta whiteheadi*, *Sylvia sarda*, and *Certhia familiaris corsa* taken in May 1908 in Corsica, and accompanying remarks.)

1909. Rev. F. C. R. Jourdain, Ornithol. Jahrbuch, xx. pp. 139–143, "Weitere Beiträge zur Kenntnis der Eier von *Larus audouini* Payr." (Notes on the eggs and breeding habits of *L. audouini* and *L. argentatus cachinnans* as observed near Corsica and Sardinia.)

1909. Rev. F. C. R. Jourdain, Bull. B. O. C. xxv. p. 39. (Exhibition of a series of 14 eggs of *Larus audouini* Payr.)

1909. Rev. F. C. R. Jourdain and R. H. Read, Bull. B. O. C. xxv. pp. 22–3. (Exhibition of a series of eggs of 50 species of Corsican birds with nests, and notes on the results of two visits in 1908 and 1909.)

1910. Dr. G. Schiebel, Ornithol. Jahrbuch, xxi. p. 102, "Neue Vogelformen aus Corsica." (Descriptions of 7 new subspecies from Corsica and notes on other forms obtained by the writer in May and June 1910.)

1910. Dr. C. Parrot, Ornith. Monatsber. xviii. pp. 153–156, "Neue Vogelformen aus dem mediterranien Gebiet." (Includes descriptions of 7 new subspecies from Corsica obtained between January and June 1910, and critical remarks on those described by Dr. Schiebel.) Also correction of nomenclature, *t. c.* p. 184.

1910. Dr. C. Parrot, Ornith. Jahrbuch, xxi. pp. 121–166, "Beiträge zur Ornithologie der Insel Korsika." Full critical notes on some 41 forms, including descriptions of *Ægithalus caudatus tyrrhenicus* and *Regulus ignicapillus minor*. [First instalment: but we notice with deep regret the announcement of Dr. Parrot's untimely death in January last.]

As will be noticed, this list contains references to a few papers in which Sardinian subspecies which are common to both islands have been described, but no attempt has been made to include works which deal with the fauna of Sardinia only, such as the papers by Cara, Salvadori, and Brooke. Lord Lilford explored the islands in the Straits of Bonifacio

in his yacht while searching for the breeding-places of *L. audouini* (*cf.* 'Ibis,' 1887, pp. 261–283), and also obtained in February 1875 the specimens of *Carduelis citrinella corsicana* which were figured in Dresser's 'Birds of Europe,' iii. pl. 167. The works of Giglioli, Arrigoni, and Martorelli also contain references to Corsican birds. Major H. Trevelyan visited the island from Jan. 13 to Feb. 23, 1909, and obtained 36 specimens of 16 species, which he presented to the British Museum; these are now incorporated in the general collection.

In the following paper the nomenclature of Dr. Hartert in his 'Vögel der paläarktischen Fauna' has been adopted (with a few modifications) as far as possible, not only because it is the only general work on the Palæarctic ornis which gives an adequate description of the numerous forms which have already been described, but also because it is an attempt to rigidly carry out the rules of International nomenclature. In this work also two races from Corsica are described for the first time (*Certhia familiaris corsa* and *Parus cæruleus ogliastræ*).

Systematic List.

1. Corvus corax sardus Kleinschmidt. Sardinian Raven.

Corvus sardus Kleinschmidt, Ornithol. Monatsberichte, xi. p. 92 (1903—Sardinia).

Local name: *Corbo.* The Raven is found both in Corsica and Sardinia and is a sedentary species, nowhere plentiful, but generally to be met with in scattered pairs along the rocky coasts and also in small numbers among the mountains inland. The Sardinian form is intermediate between the continental race, *C. corax corax* L., and the Maroccan bird, *C. corax tingitanus* Irby, but has, as a rule, a longer wing and a more slender bill than the latter form, while it closely resembles the Spanish race, *C. corax hispanus* Hart. & Kleinschm. Four specimens obtained by Dr. Parrot from Corsica shew considerable variation, but all have a short tarsus and have the bill decidedly longer and more slender than in *C. c. tingitanus*; they are probably referable to

C. c. sardus. Most of the breeding-places are in the sea-cliffs, where alternative sites close at hand are utilized year after year. Occasionally, however, a pair may be found breeding in an isolated clump of rocks at some distance from the sea. Whitehead found three nests with eggs, two clutches of 6 eggs, and one addled set of 4, all on rocks. Those which I examined in 1908 and 1909 were also on rocks and all contained five well-fledged young, which were still in the nest at the end of May. The eggs are apparently laid about the end of March or the first week of April, so that the nesting-season is about a month earlier than in S. Spain, though rather later than in the British Isles. Average size of 16 Corsican eggs, 46·55 × 32·78 mm.; max. 59·3 × 36·5, min. 44 × 30·5.

2. Corvus cornix sardonius Kleinschmidt. Sardinian Hooded Crow.

Corvus sardonius Kleinschmidt, Ornithol. Monatsberichte, xi. p. 92 (1903—Sardinia).

Local name: *Cornacchia.* This form, originally described from Sardinia, is common to both Corsica and Sardinia (Hartert, Vög. pal. Fauna, i. p. 10). Its distinctive characters are its slightly smaller size and a pale brownish tinge, which is apparent on the grey, both above and below. It is a common resident on the low ground and is most numerous along the east coast, but is rare or absent in the hills inland. In its breeding-habits it shews extreme caution, although bold enough at other times; and it is interesting to note how a pair of birds, which have been silent and skulking hitherto, will suddenly break out into discordant and noisy croaking when they become aware that their nest has been discovered. As noted by Wharton, a favourite breeding-place is in a tree on the border of a swamp. The eggs are usually 4, sometimes 5 in number, and are laid from April 12 (Wharton) to about May 10. Whitehead, however, took none before April 26. Average size of 28 Corsican eggs, 43·35 × 29·52 mm.; max. 48·5 × 30·7 and 45·7 × 31·2, min. 40·9 × 28·2 and 41·4 × 27·8 mm.

3. Corvus corone L. Carrion-Crow.

A scarce winter visitor, noted on a few occasions by Whitehead and by Backhouse near Ajaccio. Apparently it has been known to stay and breed on at least one occasion, for Wharton ('Ibis,' 1876, p. 24) records it as nesting on April 30, a rather late date for the south. Dr. Parrot (Orn. Jahrb. xxi. p. 126) is somewhat sceptical as to the occurrence of this species, but it is scarcely probable that all three observers were mistaken.

4. Corvus frugilegus L. Rook.

Winter visitor: according to Whitehead very common on the east coast, leaving at the end of February and not seen after the beginning of March. Parrot noticed several birds, which probably belonged to this species, near Biguglia on Jan. 7, and also saw a flock of about 20 over the Golo Valley.

5. Colœus monedula L. Jackdaw.

A scarce winter visiter: Whitehead observed a few in company with Rooks in winter on the east coast.

6. Pica pica (L.). Magpie.

An accidental autumn and winter visitor, only twice recorded. Giglioli mentions one seen near Corte on Sept. 16, 1877, and Parrot records another from the north-east of Corsica near Biguglia on Jan. 7, 1910.

7. Garrulus glandarius ichnusæ Kleinschmidt. Sardinian Jay.

Garrulus ichnusæ Kleinschmidt, Ornithol. Monatsber. xi. p. 92 (1903—Sardinia).

Garrulus glandarius sardus Tschusi, Ornithol. Jahrbuch, xiv. p. 140 (1903—Sardinia).

Local name: *Ghiandaia.* Common to both Corsica and Sardinia, and tolerably plentiful in the wooded parts of the low ground and foot-hills, though in the pine-forests on the mountains it is comparatively rare. It is an easily recognisable form, and the distinctions between it and the British race were pointed out by Backhouse as far back as 1891.

It is rather a smaller bird than the ordinary continental race, with only a slight reddish tinge on the grey back. The eggs are 5 or 6 in number and may be found during the first half of May, usually from about the 7th to the 16th. Average size of 43 Corsican eggs, 31·25 × 23·2 mm.; max. 34·5 × 23·5 and 31 × 24·4, min. 28·5 × 22·8 and 30 × 21·7. They vary a good deal in type of colouring as well as in size. Like the other Jays, the hen is a very close sitter and an excellent mimic, imitating the mew of the Buzzard to perfection.

8. Pyrrhocorax pyrrhocorax (L.). Chough.

Whitehead mentions having seen five on Jan. 29, and met with them again at the same place on March 16. No other records.

9. Pyrrhocorax graculus (L.). Alpine Chough.

Whitehead saw several large flocks, but was not able to identify them till March 16, 1884. He was informed by the natives that they stay to breed, but considered this doubtful. Giglioli records this species as seen in the Valle della Restonica on Oct. 5, 1889.

10. Sturnus vulgaris L. Starling.

Local name: *Stornello* (North Corsica). A winter visitor, chiefly seen on the autumn and spring passage. Wharton only noticed it from February to April, but Whitehead observed small flocks in winter and, curiously enough, saw none after the end of February. Backhouse saw only one bird in the Ajaccio market during December and January; but Giglioli records great parties near Sagone on Oct. 5, 1877, and Playne notes a flock of Starlings near the east coast in April 1897. Parrot records one from the Campo de L'Oro on March 1 and two flocks on March 17, while others were met with on March 21–22 between Piana and Cargese and near Sagone. The specimens obtained by him proved to agree closely with Central European birds.

11. Sturnus unicolor Temminck. Sardinian Starling.

Giglioli was the first to record this species. He did not meet with it himself, but it was reported as a not uncommon

visitor to Sartène and Bonifacio, though not resident there. It has apparently extended its breeding-range northwards of late years, and has now established itself at any rate as a summer visitor in the low-lying country to the south-east of the island, where a good many scattered pairs breed in holes of cork-oaks. First eggs found on May 9.

12. Oriolus oriolus (L.). Golden Oriole.

Visits the island on passage only. Wharton saw large numbers, chiefly males, at Biguglia on April 17, but few afterwards. Whitehead records its first occurrence on April 24; but he saw few pass, and the last on May 29.

13. Coccothraustes coccothraustes (L.). Hawfinch.

Local names: *Capi grossi* (north), *Schia korino* (south); *Pizzigone* (Giglioli). Resident and not uncommon, but owing to its retiring habits not often seen. It breeds not only in the low ground, but also in the mountain forests to over 3000 ft. at least. Jesse records it from the Bastia market, while Backhouse, Trevelyan, and Parrot obtained specimens from the Ajaccio market in winter. Whitehead describes it as fairly common, but very local. He only saw one bird on the west coast, but took two nests with fresh eggs on May 16 and an incubated clutch on June 6. I found nests in 1908 and 1909 in lichen-covered cork-oaks with full clutches on May 27 and 28, and also observed the birds in the alder groves among the high pine-forests in the middle of May. (For notes on Corsican specimens of this species, see Hartert, Vög. pal. Fauna, i. p. 56, and Parrot, Ornith. Jahrbuch, xxi. p. 127.) Average size of 9 eggs, 23·22 × 17·31 mm.

14. Ligurinus chloris chloris (L.). Greenfinch.

Local name: *Verdone*. A tolerably common resident in the hills as well as on the low ground. Parrot records this species under the name of *Chloris chloris aurantiiventris* (Cab.) with a query (?), but all the breeding birds seen by me were obviously duller in the colouring of the under surface than Spanish birds. From the wing-measurements

given (Orn. Jahrb. xxi. p. 130) it appears, however, that Corsican birds are, as might be expected, shorter-winged than continental specimens, and may eventually be separated on that account. Eggs, 4–5, usually laid about mid-May, but on one occasion by May 1.

15. Carduelis carduelis tschusii Arrigoni. Sardinian Goldfinch.

Carduelis carduelis tschusii Arrigoni, Avicula, 1902, p. 104 (Sardinia).

Local name: *Cardellina*. This small, dark, short-winged, and slender-billed race is common to Corsica and Sardinia, and is an extremely numerous resident in all the low ground and foot-hills, but appears not to extend its range to any height in the mountains. Probably several broods are reared during the season, as Whitehead in his MSS. notes records having found young at the beginning of April. I met with one nest with young on May 11, but found many with fresh eggs in the latter part of May, and Whitehead took fresh eggs as late as June 10. The beautiful little nest is often placed in the olive, ilex, and cork-oak trees near the villages, and is distinguishable at a glance from that of the Serin by the white down lining, which replaces the thick lining of hair found in the rather smaller nest of the latter bird. The eggs, however, vary in size a good deal and are often indistinguishable, though those of the Goldfinch are usually longer. Average size of 42 Corsican eggs, 16·81 × 12·79 mm.; max. 18·2 × 13·2 and 17·9 × 13·5, min. 15·6 × 13·1 and 15·8 × 12.

16. Carduelis spinus (L.). Siskin.

Whitehead met with this species in the early spring of 1884: a male was shot by him on Feb. 4, and some individuals stayed till nearly the end of March.

17. Carduelis cannabina mediterranea (Tschusi). Mediterranean Linnet.

Acanthis cannabina mediterranea Tschusi, Ornith. Jahrbuch, xiv. p. 139 (1903—Dalmatia).

Linnets are common in winter in Corsica, and a few pairs

are resident. According to Dr. Parrot the specimens obtained in winter belonged to the small Mediterranean race. Whitehead saw a pair building in a high valley among the mountains on March 17, and Playne describes this species as common in the hills in April. We came across a pair or two which haunted some rocky islets off the east coast on May 15, and must have been breeding there.

18. Carduelis citrinella corsicana (Koenig). Corsican Citril Finch.

Citrinella corsicana Koenig, Ornith. Monatsber. vii. p. 120 (1899—Corsica).

Local names: *Ouvaron*; *Lueru* (Giglioli). This very distinct form, easily recognisable by its brown back and yellowish rump, was figured by Dresser in the 'Birds of Europe,' vol. iii. pl. 167, as the winter plumage of the Citril Finch, from specimens obtained by Lord Lilford in 1875. It is a common resident, in the summer months chiefly confined to the mountains, though a few pairs breed in the "macchia" on the hill-sides close to the sea, but descending to the low ground in the winter and consorting with Serins, Goldfinches, and Linnets. In some of the more open parts of the mountains, where the forest is replaced by low scrub and scattered trees, it is extremely numerous, and its musical notes may be heard in all directions among the macchia. Whitehead ('Ibis,' 1885, p. 39) gives a good description of the nest, and notes the variation in the breeding-season according to altitude. He met with young a few days old near the coast on April 29, while on May 14 he found fresh eggs in the hills, and higher still some birds had not built by the end of May. Average size of 8 Corsican eggs, 17·65 × 13·4 mm.; max. 19 × 13·5 and 18·2 × 13·7, min. 16 × 12·5.

19. Serinus canarius serinus (L.). Serin.

Local names: *Ziarina* (north), *Verdone* (south); *Ziverino* (Giglioli). This is another very common and characteristic resident, the numbers of which are increased during the winter by immigrants. It is most plentiful on the low ground and

foot-hills, nesting, as Whitehead remarks, in the olive and cork trees, often quite close to villages. It also breeds in ilex and pine trees. Unlike the Goldfinch, however, it is also met with in the clearings of the pine-forest, where there is an undergrowth of heath (*Erica*), up to at least 3000 ft., and here the nest may occasionally be found in tall heath. The tiny structure with its characteristic lining of hair is, as a rule, difficult to find, even where the birds are common. Not one of the seven or eight nests examined contained more than four eggs. Whitehead took eggs on April 8 and 16; but although one nest was found with fledged young on May 13, seven others all contained eggs between May 9 and 30.

20. Loxia curvirostra curvirostra L. Crossbill.

Resident in the pine-forests, where Whitehead describes it as fairly common, and saw a few family-parties of six or seven on the wing in May. Out of several shot, none were in bright red plumage. Hartert, who has compared specimens, ascribes them to the ordinary continental form. I met with one flock of perhaps twenty birds in high-lying pine-forest on May 27, all of which appeared to be in yellowish-green plumage. It was interesting to watch them at work on the cones which still hung on a dead pine, but after a few seeds had been extracted the cone was often allowed to fall to the ground. Among a series of Corsican bird-skins recently acquired by the Hon. W. Rothschild are those of two adult Crossbills, one in red plumage, and also a nestling. All are from Vizzavona, and the old birds agree well with the ordinary continental race, except in being shorter-winged (95 and 90 mm.). The nestling, which cannot have left the nest for more than two or three weeks, is dated September 25, so that eggs must have been laid about the end of July or early in August!

21. Fringilla cœlebs tyrrhenica Schiebel. Corsican Chaffinch.

Fringilla cœlebs tyrrhenica Schiebel, Ornith. Jahrbuch, xxi. p. 102 (1910—Corsica).

Local names : *Pinzilione* (north), *Pincione* (south).

An extremely common and widely distributed resident, breeding in summer not only on the low ground but also in the mountain forests to well over 3000 ft. at least, and probably higher. Corsican birds appear to belong to a fairly recognisable race, in which the colour of the whole upper side is darker, while the black on the wings is remarkably deep. Parrot (Orn. Jahrb. xxi. p. 137), however, states that he has a precisely similar specimen from W. Prussia in autumn! Besides the ordinary notes to which we are accustomed in England the Corsican bird has also a long drawn out, Greenfinch-like note, which I have noticed in Denmark and other parts of the Continent. Whitehead took the first eggs on May 11, but on one occasion I found young on May 9, though many fresh clutches, usually with 4, sometimes 5 eggs, were found in the latter part of May. Average size of 13 Corsican eggs, 19·13 × 14·98 mm.; max. 20·3 × 15·5, min. 18 × 15 and 18·5 × 14·4.

22. Fringilla montifringilla L. Brambling.

Local name : *Pinziolo* (Giglioli). Winter visitor: recorded by Giglioli on passage in October, and by Parrot twice from the Ajaccio market, as well as in small flocks on the Campo de L'Oro on February 7 and 15.

23. Petronia petronia hellmayri Arrigoni. Sardinian Rock-Sparrow.

Petronia petronia hellmayri Arrigoni, Avicula, vi. p. 104 (1902—Sardinia).

A local resident in small numbers. Wharton and Parrot record it from the neighbourhood of Ajaccio in December and March. It must also breed in this district, as Parrot subsequently received a specimen on May 27. Whitehead saw very few on the west coast, but met with one or two small flocks on the east side in winter and also found a few pairs, evidently nesting, in high mountains at the end of May. I saw a few near Solenzara on May 7; and on May 10, while inspecting a nest of the Red Kite, *Milvus milvus*, was interested to see a number of Sparrows going in and out of

it. On climbing the tree I found a single big young Kite in grey down, but could find no Sparrows' nests among the foundations of the Kite's nest. It was interesting to note that the Sparrows only vacated the nest on the return of the Kite, and evidently subsisted on the pickings of the Kite's larder. The mystery of the nest was, however, solved by accident, for on May 29 we happened to be in the same district again. Several pairs of Bee-eaters, *Merops apiaster*, were breeding in the hard soil, not in steep banks, but in burrows made in almost flat ground. While digging out one of these I was astonished to come across feathers, bits of straw, and all the untidy mess usually associated with a Sparrow's nest, and presently I was able to extract the nest and six typical maroon-coloured Rock-Sparrow's eggs! Five minutes' watching enabled us to identify the anxious parent as she flew from bush to bush, obviously uneasy. Another bird was carrying building material in its bill, and probably several pairs were breeding close at hand *. Subsequently I obtained another nest at the end of May, which was placed in a hole in a cork-oak, and contained the remarkably large number of 8 eggs. These 14 eggs average in size 21·5 × 15·2 mm.; max. 22·7 × 14·9 and 21 × 16, min. 20·3 × 15·8 and 22·2 × 14·5.

The Sardinian Rock-Sparrow is not a well-defined local race, but is distinctly darker than specimens from the European continent.

24. Passer italiæ (Vieill.). Italian Sparrow.

Local names: *Passera*; *Cardaino* (Giglioli). A very common resident in the inhabited parts of the island, especially on the low ground. It is, however, absent from some of the hill-villages. Parrot has pointed out that, as a rule, Corsican birds are rather shorter-winged than Italian specimens (Ornith. Jahrbuch, xxi. p. 141). Like

* The reference in the Orn. Jahrb. xxi. p. 139 to nests discovered in the eyrie of the Red Kite is due to a misunderstanding of some remarks made by me at the Berlin Ornithological Congress on the parasitic habits of this colony. [F. C. R. J.]

P. domesticus it nests in trees as well as in buildings and often several big, untidy nests may be seen high up in the olive-trees close to the towns. The holes left for scaffolding in houses are also frequently occupied. The breeding-season is rather late: the earliest date I have for a full clutch is May 9, but few eggs are laid before the middle of the month and most in the latter part of May and early in June, while the clutch generally consists of 5 or 6 eggs.

[*Passer hispaniolensis arrigonii* Tsch. (Ornith. Jahrbuch, xiv. p. 8), described from Sardinia, may possibly occur in Corsica also, but at present there seems to be no evidence to that effect.]

25. Passer montanus (L.).

A series of five specimens was collected for Dr. Parrot from the neighbourhood of Ajaccio in mid-May, and Dr. Schiebel also recognised it. None of the other observers appears to have noticed it. Wings 66·5–69 mm. (4 males), 63·5 (1 female).

26. Emberiza calandra insularis Parrot. Corsican Corn-Bunting.

Emberiza calandra obscura Parrot, Ornith. Monatsber. xviii. p. 53 (1910—Corsica).

Emberiza calandra insularis Parrot, *t. c.* p. 184.

Both Wharton and Whitehead describe the Corn-Bunting as a fairly common resident, but Parrot noticed none near Ajaccio till March 1, and regards it as a migrant. It is probably resident in the low-lying parts of the island, but is not found in the mountains, and is subject to local movements during the winter. It is apparently commonest on the Campo de L'Oro, but also breeds sparingly along the east side of the island. Parrot distinguishes it on account of the darker ground-colour of the mantle and more distinct markings, but I have not been able to examine specimens. The eggs are laid in the latter half of May, and are 5–6 in number; 11 Corsican examples average only 23·57 × 16·61 mm. in size; max. 24·3 × 17·1, min. 23 × 16·5 and 24 × 16·1.

27. Emberiza cirlus nigro-striata Schiebel. Corsican Cirl Bunting.

Emberiza cirlus nigrostriata Schiebel, Ornith. Jahrbuch, xxi. p. 103 (1910—Corsica).

A very generally distributed species, descending to the plains during the winter months, but breeding in the mountains to over 3000 ft., as well as in smaller numbers on the low ground. Schiebel distinguishes the Corsican race on account of the darker and more extensive markings on the under surface. Parrot, however, states that in some cases this character does not hold good. The five examples that I have examined from Corsica were certainly much more striated on the under side than continental birds, and tend to support Dr. Schiebel's view. This species breeds in scattered pairs among the macchia on the hill-sides, nesting in the heath, furze, and bushes, generally 2 to 4 ft. above the ground. Most nests contain 4 eggs, but occasionally 5 are met with, and full clutches may be found as early as May 13, though more generally between that date and the beginning of June. Average size of 48 Corsican eggs, 21·57 × 15·86 mm.; max. 23·7 × 16·5 and 22·5 × 16·7, min. 19·3 × 15·4 and 20·4 × 14·7.

28. Emberiza hortulana L. Ortolan.

Wharton reports a few seen at Biguglia on April 30 and May 1. No other records.

29. Emberiza schœniclus (L.). Reed-Bunting.

Winter visitor, not common. Wharton shot the only one he saw on March 17 at Biguglia; and Whitehead reports a few as seen in winter.

30. Melanocorypha calandra (L.). Calandra Lark.

Only mentioned in Giglioli's list, where it is recorded as scarce.

31. Calandrella brachydactyla brachydactyla (Leisl.).

Resident in small numbers. Whitehead saw only a few on the east coast, but on June 24 met with it in numbers

on the west side and found a nest with two eggs. Parrot obtained a single dark male bird, which was shot on April 19 near Cocame. A Lark seen in a cornfield near Aleria on May 7 was almost certainly of this species.

32. Lullula arborea familiaris Parrot. Corsican Wood-Lark.

Lullula arborea familiaris Parrot, Ornith. Monatsber. xviii. p. 153 (1910—Corsica). *Cf.* Hartert, Vög. pal. Fauna, i. p. 242.

Local names: *Ciurcullu* (north), *Cuchagiola* (south); *Peúda* (Giglioli), generic. A common resident, not only in most of the open country on the low ground, but also in smaller numbers in the clearings in the forests and on the hills up to over 3000 ft. Hartert was the first to point out the characteristics of this local race, but had only winter-killed specimens, which might have been migrants. As stated by Parrot, the upper surface is darker and less rusty than in the continental form, while the rump and upper tail-coverts are olive-grey brown and the streaks on the breast more distinct. Whitehead met with flocks in the winter months, but Backhouse describes it as haunting the waste ground in small parties in winter, and Parrot as usually found in pairs. Apparently the breeding-season is late in Corsica, for Whitehead found numbers of nests after May 13, and those which I saw were taken between May 16 and 31. The clutch consists of 4 or 5 eggs, on which the hen sits so closely that she is sometimes caught by the natives to be kept as a cage-bird. The eggs are rather variable in size, but the average differs little from that of the ordinary form. Average size of 24 Corsican eggs, 20·94 × 15·96 mm.; max. 24·3 × 16·4, min. 19·4 × 16 and 20·7 × 15·2.

33. Alauda arvensis cantarella Bp. Mediterranean Skylark.

Local name: *Peúda* (Giglioli), generic. Skylarks are common winter visitors to Corsica, but the majority have left by the end of March. Parrot, however, received a female obtained on April 5, so that possibly a few pairs

breed on the island. Wharton describes the bird as not at all common in autumn or early winter, very common from January to March, but rare in April: Whitehead saw none after March, and says it is not nearly so common as the Wood-Lark; while Backhouse found it very abundant in January near Ajaccio, and Parrot only met with three individuals on the Campo de L'Oro on March 1 during the whole of his stay. Two specimens obtained by Parrot had remarkably short wings (96 and 103 mm.), and are ascribed by him to the Mediterranean race.

[To be continued.]

VIII.—*On the Birds collected by Mr. Claude H. B. Grant at various Localities in South Africa.* By W. L. Sclater, M.A., F.Z.S., M.B.O.U. *With Field-Notes* by the Collector.

(Plates III. & IV. and Text-figures 8 & 9.)

For a period of nearly five years Mr. Claude Grant was engaged in forming a collection of the Vertebrates of South Africa. The cost of this exploration was entirely borne by Mr. Charles D. Rudd.

The choice of localities to be visited and the general direction of the matter was left to Mr. Oldfield Thomas, while the primary object of the exploration was to increase the collection of Mammals in the National Collection, a result which was amply accomplished, and is fully detailed in the series of papers published by Messrs. O. Thomas and H. Schwann in the 'Proceedings of the Zoological Society of London' for the years from 1904 to 1908.

In the intervals, however, of trapping small Mammals, Mr. Grant found time to make a very extensive collection of bird-skins. These, apart from the novelties, are a most valuable addition to the British Museum, as the South African series there was previously in some respects singularly deficient.

The following is a dated itinerary shewing the various localities at which birds were collected, all of which will be found in the sketch-map (text-fig. 8, p. 213).